

on December 8, 2004, and December 8, 2005, respectively.³⁴⁹ Therefore, because these additional suggestions are beyond the scope of the *AWS Fifth Notice* and address issues already decided in prior Commission decisions, we decline to adopt these requests herein.

2. Relocation of Incumbent BRS Licensees in the 2150-2160/62 MHz Band

101. *Background.* In the *AWS Fifth Notice*, the Commission stated that there may be instances where an AWS entrant relocates more BRS facilities than an interference analysis would indicate was technically necessary.³⁵⁰ The Commission noted, for example, that an AWS entrant might be required to relocate facilities outside its own service area to comply with the comparable facilities requirement.³⁵¹ In that event, a subsequent co-channel AWS entrant in an adjacent geographic area might also benefit from the relocation.³⁵² The Commission noted, in addition, that the relocation of a single BRS facility might benefit more than one AWS entrant.³⁵³ The Commission therefore sought comment on whether it should require AWS licensees who benefit from an earlier AWS licensee's relocation of a BRS incumbent in the 2150-2160/62 MHz band to share in the cost of that relocation.³⁵⁴ In particular, the Commission sought comment on what criteria could be used to identify whether a subsequent AWS licensee has an obligation to share the cost of relocating a BRS incumbent and how costs should be apportioned among new entrants.³⁵⁵ The Commission further sought comment on whether cost-sharing obligations should be subject to a specific cap, whether it should adopt formal cost-sharing procedures such as the Part 24 cost-sharing plan, and whether a clearinghouse should be assigned to administer the process.³⁵⁶

102. *Comments.* Commenters addressing the issue generally agree that the costs of a BRS system relocation should be shared among AWS licensees that benefit from the relocation.³⁵⁷ Commenters assert, in particular, that AWS licensees in the F Block, which overlaps that portion of BRS channel 1 spectrum from 2150-2155 MHz, should be entitled to share the costs of relocating BRS channel 1 and 2/2A incumbents with future AWS licensees that are licensed to use the upper one megahertz of BRS channel 1 (2155-2156 MHz) and the spectrum now occupied by BRS channels 2 and 2A (2156-2160/62 MHz).³⁵⁸ However, few commenters offer details regarding what cost-sharing rules we should adopt. CTIA, PCIA, and T-Mobile support adopting the PCS cost-sharing framework.³⁵⁹ CTIA also states that "to ensure consistent treatment of similar services, the Commission should develop a single set

³⁴⁹ See 47 C.F.R. § 101.69(e).

³⁵⁰ *AWS Fifth Notice*, 20 FCC Rcd at 15889, ¶ 51.

³⁵¹ *Id.*

³⁵² *Id.*

³⁵³ *Id.*

³⁵⁴ *Id.*

³⁵⁵ *Id.*, 20 FCC Rcd at 15890, ¶ 52.

³⁵⁶ *Id.*

³⁵⁷ See CTIA Comments at 14 ("all those that benefit from the relocation of BRS incumbents should be required to pay a proportional share of the costs of relocation"); PCIA Comments at 2-3; T-Mobile Comments at 2, 4; WCA Comments at 2, n.41 (stating that "[t]here is no doubt that multiple AWS licensees will benefit from most BRS relocations and thus cost sharing may be appropriate"); Comsearch Reply at 4; PCIA Reply at 4; US Cellular Reply at 4.

³⁵⁸ See Sprint Nextel Comments at 2, n.3 ("AWS licensees should be free to seek reimbursement for relocation expenses from new entrants that occupy the 2155-2162 MHz band once the spectrum above 2155 MHz is licensed.").

³⁵⁹ PCIA Comments at 3; T-Mobile Comments at 4; CTIA Reply at 9.

of cost-sharing rules and universally apply them to all implicated services.”³⁶⁰ However, none of these commenters offer guidance on how to modify tests and procedures designed to work for FS relocation so that they work for BRS. US Cellular advocates adopting a cost-sharing plan in which only co-channel interference with BRS systems would be considered for purposes of triggering an AWS cost-sharing obligation.³⁶¹ It argues that excluding adjacent channel interference “for cost sharing purposes greatly simplifies the cost-sharing plan and eliminates many possible disagreements over whether an AWS system would have caused or experienced adjacent channel interference.”³⁶² Comsearch suggests using the line-of-site test as a method for identifying whether an AWS entrant is a beneficiary of the relocation of a particular BRS system.³⁶³ T-Mobile recommends that, if the line-of-sight test is chosen, “the Commission should also specify a particular model for determining line of sight, as well as any other variable inputs into such a determination so there is no ambiguity as to whether or not a threshold condition has been met.”³⁶⁴ Finally, while no commenter has discussed whether there should be a cap on cost-sharing obligations specifically (*i.e.*, a cap on the costs that a relocater can seek from other AWS licensees that benefit from the relocation), CTIA has proposed that the Commission establish a cap on relocation costs.³⁶⁵ Specifically, it proposes, as described above, that each BRS incumbent submit, pre-auction, an estimate of what it will cost to relocate the incumbent’s systems, and further proposes that an AWS licensee relocating the incumbent be obligated to spend no more than 110% of this estimate.³⁶⁶

103. With regard to the use of a clearinghouse to administer the cost-sharing process involved in the BRS relocation, the few commenting parties addressing the issue are generally supportive.³⁶⁷ For example, Comsearch states that, without a clearinghouse, the cost-sharing process would be inefficient and subject to disputes, thereby hindering and delaying the relocation process.³⁶⁸ PCIA asserts that “the application of the cost-sharing model to BRS relocation, including the use of a clearinghouse, will be necessary” because “BRS channel 1 overlaps not only the F Block of AWS spectrum, but also new AWS spectrum at 2155-2180 MHz” and because of the potential for BRS facilities to cross more than one AWS market.³⁶⁹ CTIA contends that using a third-party clearinghouse “is essential to an efficient and effective cost-sharing mechanism.”³⁷⁰

104. *Discussion.* We find that cost sharing will provide for a more equitable relocation process by spreading the costs of the relocation among the AWS licensees that benefit. In addition, cost sharing should accelerate the relocation process by encouraging new entrants to relocate systems themselves rather than wait for another entrant to do so. We note that no commenter opposes the

³⁶⁰ CTIA Reply at 9.

³⁶¹ US Cellular Reply at 4; *see also* Sprint Nextel Comments at 2, n.3.

³⁶² US Cellular Reply at 4.

³⁶³ Comsearch Reply at 3, n.10.

³⁶⁴ T-Mobile Reply at 5.

³⁶⁵ *See* CTIA Comments at 7, 9-10.

³⁶⁶ *Id.*

³⁶⁷ *See* CTIA Comments at 14; Comsearch Reply at 2, 4; PCIA Reply at 4. However, as noted below, WCA, though not opposed to the use of a cost-sharing clearinghouse, expresses the view that a third-party administrator is not needed to oversee the relocation process “due to the relatively limited number of BRS facilities that will need to be relocated . . . and the fact that most are likely to be relocated pursuant to private agreements negotiated among AWS licensees, BRS licensees and BRS spectrum lessees” WCA Comments at 22.

³⁶⁸ Comsearch Reply at 4.

³⁶⁹ PCIA Reply at 4.

³⁷⁰ CTIA Comment at 14.

imposition of such obligations, and several expressly support it.³⁷¹ We therefore conclude that we should establish cost-sharing obligations for AWS licensees that benefit from another AWS licensee's relocation of a BRS incumbent from the 2150-2160/62 MHz band.³⁷²

105. We further conclude that the Part 24 cost-sharing rules provide an appropriate framework for BRS relocation cost sharing. As discussed above, the Part 24 cost-sharing rules and procedures have proven effective in sharing the costs of FS relocation. Admittedly, as the Commission noted in the *AWS Fifth Notice*, applying the PCS cost-sharing regime to BRS will require significant changes to account for the differences between BRS services and fixed point-to-point services. We find, however, that in most respects, the PCS cost-sharing regime can be applied to BRS. We further find that the PCS cost-sharing system provides the best balance of competing concerns, such as precision and ease of administration. Adopting a regime based on the PCS cost-sharing rules will also benefit AWS licensees to the extent that they already have a familiarity with the system. In addition, we anticipate, as discussed in detail below, that an administrator of the cost-sharing system can achieve efficiencies by jointly administering BRS cost sharing with the very similar regime we have established for relocation of FS incumbents. Finally, we note that several commenters support the application of the PCS cost-sharing framework, and none suggest an alternative comprehensive cost-sharing regime.³⁷³ Therefore our implementation of a BRS cost-sharing regime is guided generally by the PCS cost-sharing rules and departs from those rules only where a different approach is justified.

106. *Clearinghouse.* We agree with those commenters who recommend using a clearinghouse to administer any cost-sharing rules the Commission may adopt in the relocation of BRS incumbents from the 2150-2160/62 MHz band. The efficiency and ability of a clearinghouse to resolve disputes among new entrants and incumbents will help to expedite the relocation process. Moreover, to the extent that the clearinghouse established to administer cost-sharing rules for the relocation of FS incumbents in the 2.1 GHz band might also administer the cost-sharing process for BRS relocation, this would promote efficiencies and reduce potential delays suggested by some commenters.³⁷⁴

107. We therefore delegate to WTB the authority to select one or more entities to create and administer a neutral, not-for-profit clearinghouse. Selection shall be based on criteria established by WTB. WTB shall publicly announce the criteria and solicit proposals from qualified parties. Once such proposals have been received, and an opportunity has elapsed for public comment on them, WTB shall make its selection. When WTB selects an administrator, it shall announce the effective date of the cost-sharing rules.

108. *Triggering A Reimbursement Obligation.* We establish the following rules for identifying when an AWS licensee entering a market triggers a cost-sharing obligation in connection with the prior relocation of a BRS system in the 2150-2160/62 MHz band.³⁷⁵ First, we limit cost-sharing obligations to

³⁷¹ See CTIA Comments at 14; PCIA Comments at 3; T-Mobile Comments at 4; Comsearch Reply at 4; PCIA Reply at 4; US Cellular Reply at 4.

³⁷² We emphasize that our conclusions with regard to the appropriate rules, procedures, and implementation of cost sharing for BRS relocation apply only to the relocation of BRS incumbents in the 2150-2160/62 MHz band. Nothing in this discussion should be taken to prejudice or apply to issues regarding the transition of incumbents in the 2.5 GHz spectrum to the new BRS/EBS band plan.

³⁷³ See PCIA Comments at 3; T-Mobile Comments at 4; CTIA Reply at 9.

³⁷⁴ At this time, we make no determination of whether a clearinghouse must provide administration for both FS and BRS-related cost sharing.

³⁷⁵ As noted above, BRS systems licensed after 1992 to use the 2160-2162 MHz band operate in that spectrum on a secondary basis and are not entitled to relocation. See *supra*, ¶ 25. We clarify that if AWS licensees relocate a system operating in the 2160-62 MHz band on a secondary basis and voluntarily agree with the incumbent to be responsible for the entire costs of relocation, including the costs of relocating the 2160-62 MHz band, the costs attributable to the relocation of the 2160-62 MHz band constitute a "premium" to the incumbent and may not be (continued....)

those AWS entrants licensed in spectrum that is co-channel, at least in part, with the bands previously used by the relocated BRS system (*i.e.*, those AWS entrants who operate using licenses that overlap with the 2150-2160/62 MHz band). We note that the Commission similarly limited the PCS cost-sharing obligations to new entrants that would have caused co-channel interference to the incumbent, and we agree with US Cellular that excluding other AWS channels [non-co-channel] for cost sharing purposes “greatly simplifies the cost-sharing plan and eliminates many possible disagreements over whether an AWS system would have caused or experienced adjacent channel interference.”³⁷⁶

109. When an AWS entrant turns on a fixed base station using a license that overlaps spectrum in the 2150-2160/62 MHz band previously used by a relocated BRS system, a cost obligation will be triggered if the base station transmitting antenna is determined to have a line-of-sight path with the receiving antenna of the relocated BRS system hub.³⁷⁷ For BRS systems using the 2150-2160/62 MHz band exclusively to provide one-way transmission to subscribers, *i.e.*, delivery of video programming, we employ a different line-of-sight test, as we have above in the relocation process, to account for the fact that interference to the BRS system would occur at the subscriber’s end user equipment. For these systems, a cost obligation will be triggered if the AWS entrant has line of sight to the BRS incumbent’s GSA.³⁷⁸

110. We choose the line-of-sight test described above as the test for triggering cost-sharing obligations for a number of reasons. As an initial matter, we note that this approach to identifying beneficiaries is supported by Comsearch and that no commenter has suggested an alternative method.³⁷⁹ Further, we have already determined that, as proposed by Sprint Nextel and other parties, line of sight provides an appropriate test for determining whether an AWS entrant in the 2150-2160/62 MHz band must relocate a co-channel BRS incumbent.³⁸⁰ It is therefore also an appropriate means of determining whether other AWS entrants would have been required to relocate the system, and have thus benefited from the relocation.

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recovered through the cost sharing process. Accordingly, in such a case, the relocater must deduct from the actual costs of relocation it submits to the clearinghouse a *pro rata* share of the costs associated with the 2160-2162 MHz band. If the system operated in the 2160-62 MHz band on a primary basis, no such deduction is necessary.

³⁷⁶ US Cellular Reply at 4. Sprint Nextel asserts that “[t]he mechanics of the interference from AWS base stations in non-adjacent AWS channel blocks are the same as for the co-channel interference described here” and that “AWS base stations in the AWS Blocks A-E will cause harmful interference to highly sensitive BRS 1-2 receive station hubs” Sprint Nextel Comments at 16, n.29. Thus, Sprint Nextel advocates using the same line-of-sight test for AWS entrants whether operating in spectrum that is co-channel to BRS system spectrum or not. *See id.* at 17. As noted above, however, we find that whether licensees in the A-E blocks can operate within line of sight of a BRS system without causing harmful interference can only be determined on a complex case-by-case analysis. *See supra*, ¶¶ 53-54.

³⁷⁷ As with the test for triggering relocation, parties applying this cost sharing test should follow the line-of-sight determination method described in Appendix D of the *Two-Way R&O and FNRPM*, Appendix D, 15 FCC Rcd 14566, 14625, 14626 (2000) (describing the method of determining whether a path between a transmitter and a receiver is line of sight).

³⁷⁸ *See* WCA Comments at 36-37; *see also* 47 C.F.R. § 21.902(f)(5) (2004). This provision specifies that a line-of-sight determination should be based on the assumption that a BRS receiving antenna is installed 30 feet above ground level at each point in the GSA, determination of the actual height of the proposed station’s transmitting antenna and actual terrain elevation data, and assuming 4/3 Earth radius propagation conditions. *Id.* We also note that any AWS transmitter within the GSA will necessarily satisfy the line-of-sight test in this case, and thus, the need for a line-of-sight analysis is obviated.

³⁷⁹ *See* Comsearch Reply at 3 n.10. T-Mobile does advocate adopting, as an alternative to the line-of-sight test, a “version of the proximity threshold [test] used in the 1.9 GHz relocation process” T-Mobile Reply at 5. However, it offers no suggestion as to what that version would look like.

³⁸⁰ *See supra*, ¶¶ 51-52.

111. As we have noted above, the line-of-sight test constitutes an easy-to-implement “bright-line” test.³⁸¹ Thus, we believe that the test satisfies the requests of several commenters for clarity and certainty in the cost-sharing process.³⁸² We also expect that the administrative burden of applying the line-of-sight test to identify beneficiaries of a relocation and the potential for disputes over its application will be limited for several reasons. First, because we have excluded licensees operating solely in adjacent and non-adjacent spectrum from cost-sharing obligations, only co-channel interference need be considered. Second, there are a relatively limited number of BRS systems and thus few systems for whom potential beneficiaries will need to be determined.³⁸³ Third, because the 2145-2155 MHz block will be licensed on a REAG basis,³⁸⁴ which is the largest geographic area license in the AWS spectrum, we expect that only one 2145-2155 MHz licensee would typically cause interference to a BRS system, and thus that there will be few instances of cost sharing between 2145-2155 MHz licensees.³⁸⁵

112. *Obtaining Reimbursement Rights.* As in the PCS system, in order to receive reimbursement from licensees that benefit from a relocation, we require an AWS relocater to register the system that has been relocated with a cost-sharing clearinghouse. Following the PCS model, as modified above for AWS relocation of FS, we provide that AWS licensees receive rights to reimbursement on the date that they enter into an agreement to relocate a BRS system in the 2150-2160/62 MHz band, and we require them to register documentation of the relocation agreement, with a clearinghouse within 30 calendar days of the date that the relocation agreement is signed. In the event that relocation is involuntary, we require the AWS licensee to file documentation of the relocation with the clearinghouse within 30 calendar days after the end of the relocation process, which will be the end of the one-year trial period in the absence of any disputes during that period.³⁸⁶

113. We further require AWS licensees, in registering their reimbursement rights with a clearinghouse, to provide certain information necessary to implement the reimbursement trigger test we have established. As discussed above, to determine whether an AWS licensee beginning operation of a base station has triggered a reimbursement obligation, a clearinghouse will apply a line-of-sight test. The precise line-of-sight method differs depending on whether the relocated system used the 2150-2160/62 MHz band for one-way transmissions to their subscribers’ end user equipment or to receive broadband data at the BRS receive station hub. Therefore, we require AWS licensees registering relocated systems to provide the following information to the clearinghouse: (1) a detailed description of the relocated system’s spectral frequency use; (2) if the system exclusively provided one-way transmission to subscribers, the GSA of the relocated system; and (3) if the system did not exclusively provide one-way

³⁸¹ See *supra*, ¶ 51. See also CTIA Comments at 5, 6 n.19 (describing the line-of-sight test as “a bright line test” that provides the “simplest, most equitable, and most cost-effective manner of protecting AWS and BRS licensees against interference . . .”).

³⁸² For example, PCIA emphasized the “need . . . for clarity in the rules and unambiguous, straight forward criteria for assessing reimbursement and cost sharing.” PCIA Reply at 4. PCIA argued that, “[o]nly then will AWS licensees be able to accurately predict the financial ramifications of BRS clearing in their pre-auction strategic planning.” *Id.* PCIA therefore urged the Commission, “in resolving the BRS relocation issues, to apply bright line tests to achieve the best and most efficient transition practicable.” *Id.* See also PCIA Comments at 5 (“Having a bright line test eliminated many disputes over whether an entity was obligated under the [cost] sharing rules.”); T-Mobile Reply at 5 (agreeing “with those commenters advocating the efficacy of bright-line tests”).

³⁸³ See *supra*, ¶¶ 13-14.

³⁸⁴ There are twelve Regional Economic Area Groupings (REAGs), the first six covering the continental United States and the other six covering smaller areas (*i.e.*, Alaska, Hawaii, the islands, and the Gulf of Mexico). 47 C.F.R. § 27.6(a)(1).

³⁸⁵ See PCIA Reply at 4.

³⁸⁶ Thus, if the relocation process is extended due to an incumbent exercising the right of return or asserting defects in the new facilities that need to be remedied, the deadline to register the system will also be extended.

transmission to subscribers, the system hub antenna's geographic location and the above ground level height of the receive station hub's receiving antenna centerline.

114. *Registration of New or Modified AWS Stations.* As noted above in our discussion of cost sharing for FS relocation, to permit a clearinghouse to identify AWS beneficiaries of an FS relocation, every AWS licensee that constructs a new site or modifies an existing site in the 2.1 GHz band must file certain site information with the clearinghouse(s) prior to commencing operations.³⁸⁷ To ensure that a clearinghouse can apply the line-of-sight test to identify beneficiaries of a BRS relocation, however, we will require AWS licensees that construct or modify a site in the 2150-2162 MHz band to file, in addition to the information required from other 2.1 GHz AWS licensees, the above ground level height of the transmitting antenna centerline. We note, in particular, that the duty to file this information applies to an AWS licensee that modifies the frequencies used by a station such that a station previously operating entirely outside the 2150-2162 MHz band now operates inside the band. We further impose a continuing duty on entities to maintain the accuracy of the data on file with the clearinghouse, including height data and spectrum use.³⁸⁸

115. *Determining Reimbursement Rights.* A particular beneficiary's cost-sharing obligation will be calculated using the PCS cost-sharing formula discussed above, which imposes on each beneficiary a *pro rata* share of the relocation cost reduced in amount by a depreciation factor. We modify the PCS formula in one respect, however, using a fifteen year depreciation period rather than the ten year period used by PCS and AWS licensees. Choosing the same fifteen-year period for depreciation that we have chosen above for the relocation sunset period ensures that any AWS beneficiary that enters BRS spectrum before the relocation sunset will incur some obligation to share in the cost of the prior relocation.

116. We will also follow the policy in the PCS cost-sharing rules that entitles relocators to full reimbursement without depreciation (rather than a *pro rata* amount subject to depreciation) where they relocate facilities that do not pose an interference problem to their own stations. This policy is intended to provide a new licensee with an incentive to relocate an incumbent's entire network instead of only those facilities that the licensee would be required to relocate under an interference analysis.³⁸⁹ Here, because we require relocation on a system-by-system basis (*i.e.*, a licensee that interferes with part of a BRS system must relocate the entire system, but not necessarily a separate system that is part of the BRS incumbent's network), we hold that relocators will be entitled to 100 percent reimbursement for the costs of relocating a particular system if they would not have triggered a relocation obligation for that system. As with the PCS and AWS rules, we adopt a simplified test for determining when a relocater would have been required to relocate the system that ignores the possibility of adjacent or non-adjacent channel interference. Specifically, we will allow full reimbursement of compensable costs if either (1) the AWS

³⁸⁷ As explained in our discussion of the cost sharing rules for FS relocation above, we require all AWS licensees constructing new sites or modifying existing sites to file site-specific data with the clearinghouse prior to initiating operations. See *supra*, ¶ 78. The site data must provide a detailed description of the proposed site's spectral frequency use and geographic location. We will also impose a continuing duty on those entities to maintain the accuracy of the data on file with the clearinghouse. We find that such an approach will ensure fairness in the process and preclude new entrants from conducting independent interference studies for the purpose or effect of evading the requirement to file site-specific data with the clearinghouse prior to initiating operations. However, we will continue to require entrants and licensees to comply with the coordination requirements currently set forth in the Commission's Rules. See, e.g., 47 C.F.R. § 24.249(a) (new entrant must file PCN with clearinghouse); 47 C.F.R. § 101.103(d) (proposed frequency usage must be prior coordinated with existing licensees).

³⁸⁸ Because the cost sharing regime depends critically on a clearinghouse having accurate information, we strongly emphasize that AWS licensees are responsible for both providing all requisite information on a timely basis and for ensuring that the clearinghouse is informed on a timely basis of any changes to that data.

³⁸⁹ See *Microwave Cost Sharing Notice*, 11 FCC Rcd 1923, 1937-38, ¶ 32 (1995); *Microwave Cost Sharing First R&O and FNPRM*, 11 FCC Rcd 8825, 8884, Appendix A ¶ 16 (1996).

relocator's licensed frequency band is fully outside the BRS system's spectrum; or (2) the AWS relocator would not have triggered relocation under the applicable line-of-sight test.³⁹⁰

117. We decline to adopt a cap on the amount of reimbursement that benefiting entrants may owe. We note that no party has expressly proposed a cost-sharing cap and that CTIA's proposal would cap actual relocation costs rather than merely capping cost-sharing obligations. However, even if the cap were to apply only to cost-sharing obligations, we are not persuaded that it is practical for incumbents to determine such costs at this time. We also note that a cap on cost-sharing obligations would have no effect on incumbents' rights to relocation costs and would only limit the rights of AWS licensees to receive reimbursement from other AWS licensees. We are therefore concerned that incumbents would not have adequate incentives to identify an appropriate cost-sharing cap. Finally, we find no basis in the record to determine a specific cap ourselves. We therefore conclude that the reimbursable costs of a BRS system relocation will not be limited to any specific maximum amount.

118. AWS licensees will therefore not have the safeguard and assurance of a specific cap on their reimbursement obligations, as they do under the PCS cost-sharing rules. We nevertheless conclude that the rules we adopt below will provide beneficiaries with adequate protection from excessive reimbursement obligations. The PCS cost-sharing rules that we will incorporate include many other protections against excessive costs and, in addition, we have made modifications to the rules, as discussed below, to add to those protections.

119. First, in defining reimbursable costs, we follow the policy in the PCS cost-sharing rules of limiting reimbursement to the actual cost of providing comparable facilities. Actual costs include those costs for which a relocator would be responsible in an involuntary relocation. In addition, incumbent transaction costs that are directly attributable to the relocation will also be subject to cost-sharing reimbursement up to a cap of two percent of the "hard" costs. Any relocation payments beyond these costs described above, so-called "premium" payments, are not reimbursable.³⁹¹ As we have with the FS cost-sharing regime, we further require relocators to prepare and submit an itemized documentation of all reimbursable relocation costs.³⁹² In providing itemization, we direct parties to provide itemization of any applicable costs listed in section 24.243(b), and for other costs, such as equipment not listed in section 24.243(b), to be guided by that provision in determining appropriate detail of itemization.³⁹³ We direct the clearinghouse to require re-filing of any documentation found to be insufficiently specific.

120. In addition to preparing the documentation described above, we require each relocator, as a prerequisite for receiving reimbursement through the cost-sharing regime, to obtain a third-party appraisal of the actual costs of replacing the system with comparable facilities prior to relocation, and to provide this appraisal to the clearinghouse with its registration.³⁹⁴ We believe that an independent appraisal will, in most cases, be a necessary safeguard against excessive costs in the absence of a specific

³⁹⁰ By comparison, the PCS rules treat a microwave link as non-interfering if it is (1) fully outside the relocator's spectrum or (2) fully outside the relocator's licensed market area. See 47 C.F.R. § 24.245(c).

³⁹¹ Thus, because a relocator is not responsible for reimbursing an incumbent's internal costs, *see supra*, ¶ 40, they likewise may not be recovered through a cost-sharing obligation.

³⁹² See 47 C.F.R. § 24.245(b).

³⁹³ See *id.*

³⁹⁴ As we have with documentation on FS relocation, *see supra*, ¶ 84, we require relocators of BRS systems, after registering a relocated system for cost-sharing purposes, to maintain documentation of cost related issues records until the applicable cost-sharing sunset date and to provide such documentation, upon request, to the clearinghouse, the Commission, or entrants that trigger a cost sharing obligation. As above, we do not require the clearinghouse to maintain cost documentation, including the appraisals, for examination by either licensees, nor do we prohibit it from doing so.

cap on reimbursement obligations.³⁹⁵ However, we also believe that there may be some cases where the appraisal adds an unnecessary cost to the process. In particular, the requested reimbursement may be low enough that the costs requested are clearly justified without the additional evidence that an appraisal provides. We therefore provide one exception to the requirement of a third-party appraisal that should allow for a more efficient process in cases where cost claims are well within the bounds of reasonableness. In particular, we will allow an AWS relocater to register its reimbursement claim without providing the third-party appraisal, on condition that, in submitting its cost claim, it consents to binding resolution of any good faith disputes regarding that claim by the clearinghouse under the following standard: the relocater shall bear the ultimate burden of proof, and shall be required to demonstrate by clear and convincing evidence that its request does not exceed the actual costs of relocating the relevant BRS system or systems to comparable facilities. We expect that, by imposing on AWS relocators a substantial burden of proof and the risk of losing reimbursement rights, we will discourage them from exercising the option to waive an appraisal except in those cases where, even in the absence of an appraisal, disputes are unlikely to arise.³⁹⁶

121. We also note that the depreciation of reimbursement obligations itself should help to deter excessive relocation costs. The fact that reimbursement obligations depreciate over time (with the limited exception noted above) will mean that the relocater will usually bear the largest share of the burden. Thus, it will provide the relocater with greater incentive to obtain relocation at a reasonable cost in the first instance.

122. Taken together, these measures should provide subsequent entrants with sufficient assurance in most cases that their cost-sharing obligations are not excessive. Should parties have good faith objections to reimbursement claims, however, they may exercise the same dispute resolution options available under the PCS cost-sharing rules, including review by the clearinghouse, and possible resolution by alternative dispute resolution methods such as arbitration.³⁹⁷ We require, as we have above with FS cost-sharing disputes, that parties submit BRS cost-sharing disputes to the clearinghouse in the first instance.

123. *Participation in the Cost-sharing Plan.* The cost-sharing obligations we establish above merely serve as defaults. As in the PCS cost-sharing rules, parties remain free to enter into private cost-sharing arrangements that alter some or all of these default obligations. Such private agreements may serve to further limit disputes regarding particular obligations. We emphasize, however, that parties to a private cost-sharing agreement may continue to seek reimbursement under the cost-sharing rules from those licensees that are not party to the agreement. Further, except insofar as there is a superceding agreement, we require all AWS licensees to participate in the cost-sharing process as established above. Thus, AWS relocators of a BRS system, to receive reimbursement, must pursue such reimbursement through the process established above, except to the extent that they have made agreements to an alternative process. Likewise, all AWS licensees that benefit from a relocation will be subject to the cost-sharing obligations established above unless there is an applicable agreement that supercedes those obligations.³⁹⁸

³⁹⁵ We also note that the cost of the third-party appraisal may be included in a claim for reimbursement.

³⁹⁶ Parties bringing such disputes may choose whether to seek binding resolution from the clearinghouse or not. If they opt out of binding resolution, the general rules for dispute resolution will apply, except that in all cases, the relocater will bear the elevated burden of proof.

³⁹⁷ We address the requirements for a good faith challenge to a reimbursement claim above in connection with cost sharing for FS relocation. See *supra*, ¶ 84. As with FS cost sharing, we require all parties to the BRS cost-sharing process to act in good faith in either registering reimbursement claims or making challenges to such claims.

³⁹⁸ We note that the obligation to file new or modified site data may not be waived by agreement.

124. *Payment Issues and Incorporation of FS Rulings.* With regard to the timing of payments, and the eligibility for installment payments, we adopt the same rules for the BRS cost-sharing regime as we applied in the PCS cost-sharing system.³⁹⁹ We also follow, in the BRS context, the ruling that cost-sharing obligations are not terminated by the physical deconstruction of the benefiting AWS base station.⁴⁰⁰

125. *Sunset.* As the Commission did with the PCS cost-sharing rules, we set a specific date on which the cost-sharing regime will cease. We conclude that the cost-sharing regime should terminate on the same day that the relocation obligation in the 2150-2160/62 MHz band sunsets. We note that after the obligation to relocate BRS incumbents sunsets, a new AWS entrant need not incur any expense to require incumbents to vacate, and therefore receives no benefit from an earlier relocation. Because licensees entering after the relocation sunset receive no benefit from an earlier relocation, we conclude that it is appropriate that they should incur no cost obligations. Accordingly, while any reimbursement obligation that has accrued on or before the cost-sharing sunset date will continue, no new obligations will accrue after that date.

IV. ORDER (WT DOCKET NO. 02-353)

126. In 2003, the Commission adopted a rule in the *AWS-1 Service Rules Order*⁴⁰¹ to require AWS licensees in the 2110-2155 MHz band to coordinate with incumbent BRS licensees operating in the 2150-2155 MHz band prior to initiating operations from any base or fixed station.⁴⁰² WCA filed a Petition for Reconsideration⁴⁰³ averring that this rule inadequately protects BRS incumbents operating in the 2150-2160/62 MHz band from interference. WCA contends that this coordination approach is inconsistent with the Commission's statement in the *AWS-1 Service Rules Order* that "until such time as [MDS] operations are relocated, they must be protected from interference from AWS systems."⁴⁰⁴ WCA adds that "had the [*AWS-1 Service Rules Order*] ended there [WCA's] petition for reconsideration would not have been necessary."

127. WCA asserts that a "coordination" requirement assumes that BRS upstream transmissions can co-exist with AWS downstream transmission on adjacent spectrum, which WCA argues is not possible if AWS licensees in the 2110-2155 MHz band are required to satisfy the same out-of-band emissions (OOBE) criteria to protect BRS licensees that they must employ to protect adjacent band AWS licensees ($43 + 10\log_{10}(P)$).⁴⁰⁵ WCA also objects to the Commission's retainer of the option of "imposing requirements on either or both parties" in the event of a dispute.⁴⁰⁶ WCA avers that ultimately, the Commission must deal with the larger issue of relocating BRS.⁴⁰⁷

³⁹⁹ 47 C.F.R. § 24.249(a), (b).

⁴⁰⁰ See *supra*, ¶ 80.

⁴⁰¹ Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Report and Order*, 18 FCC Rcd 25162 (2003) ("*AWS-1 Service Rules Order*"). We previously addressed five petitions for reconsideration of the *AWS-1 Service Rules Order* and stated that we would address WCA's petition for reconsideration of the criteria for AWS licensees to protect incumbent BRS operations in the 2150-2160 MHz band in a subsequent order. See Service Rules for Advanced Wireless Services in the 1.7 GHz and 2.1 GHz Bands, WT Docket No. 02-353, *Order on Reconsideration*, 20 FCC Rcd 14058 (2005).

⁴⁰² See 47 C.F.R. § 27.1132 (Protection of Part 21 operations). See also *supra* note 1.

⁴⁰³ Petition for Reconsideration filed by the Wireless Communications Association International, Inc. (WCA) on March 8, 2004, WT Docket No. 02-353 ("WCA Petition").

⁴⁰⁴ WCA Petition at 7 (quoting *AWS-1 Service Rules Order* at ¶ 109).

⁴⁰⁵ WCA Petition at 2, 7-8.

⁴⁰⁶ WCA Petition at 7 (quoting *AWS Service Rules R&O* at ¶ 115 & n.92).

⁴⁰⁷ WCA Petition at 3.

128. Today, in our *Ninth R&O* in ET Docket No. 00-258, we adopt significant revisions to our rules and policies regarding BRS channel 1 and 2/2A relocation. We find that our actions today have rendered the WCA Petition moot.⁴⁰⁸ We therefore dismiss the petition for that reason.

V. PROCEDURAL MATTERS

129. *Final Regulatory Flexibility Analysis for Ninth Report and Order.* As required by Section 603 of the Regulatory Flexibility Act, 5 U.S.C. § 603, the Commission has prepared a Final Regulatory Flexibility Analysis (FRFA) of the possible significant economic impact on small entities of the proposals suggested in this document. The FRFA is set forth in Appendix B.

130. *Final Paperwork Reduction Analysis.* This *Ninth Report and Order and Order* contains new or modified information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3705(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the new or modified information collections contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law No. 107-198 (*see* 44 U.S.C. § 3506(c)(4)), the Commission previously sought specific comment on how the Commission might “further reduce the information collection burden for small business concerns with fewer than 25 employees.”

131. *Congressional Review Act.* The Commission will send a copy of this *Ninth Report and Order and Order* in a report to be sent to Congress and the General Accounting Office pursuant to the Congressional Review Act, *see* 5 U.S.C. § 801(a)(1)(A).

132. *Further Information.* For further information, contact Priya Shrinivasan or Patrick Forster, Office of Engineering and Technology, at (202) 418-7005 or (202) 418-7061, or via the Internet at Priya.Shrinivasan@fcc.gov or Patrick.Forster@fcc.gov, respectively.

VI. ORDERING CLAUSES

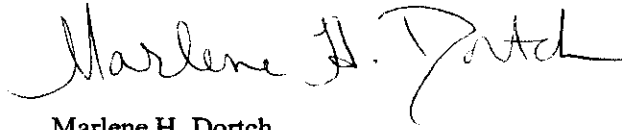
133. Accordingly, IT IS ORDERED that pursuant to Sections 1, 4(i), 7(a), 301, 303(f), 303(g), 303(r), 307, 316, 332 of the Communications Act of 1934, as amended, 47 U.S.C. Sections 151, 154(i), 157(a), 301, 303(f), 303(g), 303(r), 307, 316, and 332, this *Ninth Report and Order* IS ADOPTED and that Parts 22, 27, and 101 of the Commission’s Rules ARE AMENDED, as specified in Appendix A, [effective 30 days after publication in the Federal Register], except for Sections 27.1166(a), (b) and (e); 27.1170; 27.1182(a), (b); and 27.1186, which contain information collection requirements that are not effective until approved by the Office of Management and Budget. The FCC will publish a document in the Federal Register announcing the effective date for those sections when approved.

134. IT IS FURTHER ORDERED that the Petition for Reconsideration filed by the Wireless Communications Association International on March 8, 2004 (WT Docket No. 02-353), IS DISMISSED as moot.

⁴⁰⁸ See *Ninth R&O, supra* (adopting interference criteria based on the line-of-sight criteria that protected MDS under former Part 21 and MM Docket No. 97-217, and requiring AWS licensees in the 2110-2155 MHz band, prior to operating a base station that would cause harmful interference to incumbent BRS operations in the 2150-2160/62 MHz band, to either relocate the BRS operations or undertake system modifications).

135. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Ninth Report and Order and Order, including the Final Regulatory Flexibility Analysis to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

A handwritten signature in black ink, reading "Marlene H. Dortch". The signature is fluid and cursive, with the first name "Marlene" being the most prominent part.

Marlene H. Dortch
Secretary

APPENDIX A

FINAL RULES

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 CFR Parts 22, 27, and 101 as follows:

PART 22 – PUBLIC MOBILE SERVICES

1. The authority citation for Part 22 continues to read as follows:

Authority: 47 U.S.C. 154, 222, 303, 309, and 332.

2. Section 22.602 is amended by revising the heading, removing and reserving paragraphs (b) and (h), revising paragraphs (c), (d), (e), and (j), and by adding a new paragraph (k) to read as follows:

§ 22.602 Transition of the 2110-2130 MHz and 2160-2180 MHz channels to emerging technologies.

(b) [Reserved]

(c) Relocation of fixed microwave licensees in the 2110-2130 MHz and 2160-2180 MHz bands will be subject to mandatory negotiations only. A separate mandatory negotiation period will commence for each fixed microwave licensee when an ET licensee informs that fixed microwave licensee in writing of its desire to negotiate. Mandatory negotiation periods are defined as follows:

(1) Non-public safety incumbents will have a two-year mandatory negotiation period; and

(2) Public safety incumbents will have a three-year mandatory negotiation period.

(d) The mandatory negotiation period is triggered at the option of the ET licensee. Once mandatory negotiations have begun, a PARS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. * * *

(e) *Involuntary period.* After the end of the mandatory negotiation period, ET licensees may initiate involuntary relocation procedures under the Commission's rules. ***

(f) * * *

(g) * * *

(h) [Reserved]

(i) * * *

(j) *Sunset.* PARS licensees will maintain primary status in the 2110-2130 MHz and 2160-2180 MHz bands unless and until an ET licensee requires use of the spectrum. ET licensees are not required to pay relocation costs after the relocation rules sunset (*i.e.*, for the 2110-2130 MHz and 2160-2180 MHz bands, ten years after the first ET license is issued in the respective band). Once the relocation rules sunset, an ET licensee may require the incumbent to cease operations, provided that the ET licensee intends to turn on a system within interference range of the incumbent, as determined by TIA

TSB 10-F or any standard successor. ET licensee notification to the affected PARS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the PARS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the PARS licensee to continue to operate on a mutually agreed upon basis. If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

- (1) It cannot relocate within the six-month period (e.g., because no alternative spectrum or other reasonable option is available), and;
- (2) The public interest would be harmed if the incumbent is forced to terminate operations (e.g., if public safety communications services would be disrupted).

* * *

(k) *Reimbursement and relocation expenses in the 2110-2130 MHz and 2160-2180 MHz bands.* Whenever an ET licensee in the 2110-2130 MHz and 2160-2180 MHz band relocates a paired PARS link with one path in the 2110-2130 MHz band and the paired path in the 2160-2180 MHz band, the ET license will be entitled to reimbursement pursuant to the procedures described in §§ 27.1160 through 27.1174 of this chapter.

* * * * *

PART 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES

The authority citation for Part 27 continues to read as follows:

Authority: 47 U.S.C. 154, 301, 302, 303, 307, 309, 332, 336, and 337 unless otherwise noted.

3. Section 27.1111 is revised to read as follows:

§ 27.1111 Relocation of fixed microwave service licensees in the 2110-2150 MHz band.

Part 22, subpart E and Part 101, subpart B of this chapter contain provisions governing the relocation of incumbent fixed microwave service licensees in the 2110-2150 MHz band.

4. Section 27.1132 is revised to read as follows:

§ 27.1132 Protection of incumbent operations in the 2150-2160/62 MHz band.

All AWS licensees, prior to initiating operations from any base or fixed station, shall follow the provisions of § 27.1255 of this part.

5. Part 27, Subpart L is revised by adding Sections 27.1160-27.1190 to read as follows:

The heading for Subpart L is revised to read as follows:

Subpart L – 1710-1755 MHz, 2110-2155 MHz, 2160-2180 MHz Bands

Section 27.1102, section heading is revised to read as follows:

§ 27.1102 Designated Entities in the 1710-1755 MHz and 2110-2155 MHz bands

New Sections 27.1160 through 27.1174 are added to Subpart L to read as follows:

COST-SHARING POLICIES GOVERNING MICROWAVE RELOCATION FROM THE 2110-2150 MHZ AND 2160-2200 MHZ BANDS

§ 27.1160 Cost-sharing requirements for AWS.

Frequencies in the 2110-2150 MHz and 2160-2180 MHz bands listed in § 101.147 of this chapter have been reallocated from Fixed Microwave Services (FMS) to use by AWS (as reflected in § 2.106). In accordance with procedures specified in § 22.602 and §§ 101.69 through 101.82 of this chapter, AWS entities are required to relocate the existing microwave licensees in these bands if interference to the existing microwave licensee would occur. All AWS entities that benefit from the clearance of this spectrum by other AWS entities or by a voluntarily relocating microwave incumbent must contribute to such relocation costs. AWS entities may satisfy their reimbursement requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in § 27.1164. However, AWS entities are required to reimburse other AWS entities or voluntarily relocating microwave incumbents that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in § 27.1162) from AWS entities or other Emerging Technologies (ET) entities, including Mobile Satellite Service (MSS) operators (for Ancillary Terrestrial Component (ATC) base stations), that are not parties to the agreement. The cost-sharing plan is in effect during all phases of microwave relocation specified in §§ 22.602 and 101.69 of this chapter. If an AWS licensee enters into a spectrum leasing arrangement (as set forth in Part 1, subpart X of this chapter) and the spectrum lessee triggers a cost-sharing obligation, the licensee is the AWS entity responsible for satisfying the cost-sharing obligations under §§ 27.1160-27.1174.

§ 27.1162 Administration of the Cost-Sharing Plan.

The Wireless Telecommunications Bureau, under delegated authority, will select one or more entities to operate as a neutral, not-for-profit clearinghouse(s). This clearinghouse(s) will administer the cost-sharing plan by, *inter alia*, determining the cost-sharing obligation of AWS and other ET entities for the relocation of FMS incumbents from the 2110-2150 MHz and 2160-2200 MHz bands. The clearinghouse filing requirements (see §§ 27.1166(a), 27.1170) will not take effect until an administrator is selected.

§ 27.1164 The cost-sharing formula.

An AWS relocater who relocates an interfering microwave link, *i.e.*, one that is in all or part of its market area and in all or part of its frequency band or a voluntarily relocating microwave incumbent, is entitled to *pro rata* reimbursement based on the following formula:

$$RN = \frac{C}{N} \cdot \frac{[120 - (T_m)]}{120}$$

(a) *RN* equals the amount of reimbursement.

(b) *C* equals the actual cost of relocating the link(s). Actual relocation costs include, but are not limited to, such items as: Radio terminal equipment (TX and/or RX--antenna, necessary feed lines, MUX/Modems); towers and/or modifications; back-up power equipment; monitoring or control equipment; engineering costs (design/path survey); installation; systems testing; FCC filing costs; site acquisition and civil works; zoning costs; training; disposal of old equipment; test equipment (vendor

required); spare equipment; project management; prior coordination notification under § 101.103(d) of this chapter; site lease renegotiation; required antenna upgrades for interference control; power plant upgrade (if required); electrical grounding systems; Heating Ventilation and Air Conditioning (HVAC) (if required); alternate transport equipment; and leased facilities. Increased recurring costs represent part of the actual cost of relocation and, even if the compensation to the incumbent is in the form of a commitment to pay five years of charges, the AWS or MSS/ATC relocater is entitled to seek immediate reimbursement of the lump sum amount based on present value using current interest rates, provided it has entered into a legally binding agreement to pay the charges. *C* also includes voluntarily relocating microwave incumbent's independent third party appraisal of its compensable relocation costs and incumbent transaction expenses that are directly attributable to the relocation, subject to a cap of two percent of the "hard" costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. *C* may not exceed \$250,000 per paired link, with an additional \$150,000 permitted if a new or modified tower is required.

(c) *N* equals the number of AWS and MSS/ATC entities that have triggered a cost-sharing obligation. For the AWS relocater, $N=1$. For the next AWS entity triggering a cost-sharing obligation, $N=2$, and so on. In the case of a voluntarily relocating microwave incumbent, $N=1$ for the first AWS entity triggering a cost-sharing obligation. For the next AWS or MSS/ATC entity triggering a cost-sharing obligation, $N=2$, and so on.

(d) *T_m* equals the number of months that have elapsed between the month the AWS or MSS/ATC relocater or voluntarily relocating microwave incumbent obtains reimbursement rights for the link and the month in which an AWS entity triggers a cost-sharing obligation. An AWS or MSS/ATC relocater obtains reimbursement rights for the link on the date that it signs a relocation agreement with a microwave incumbent. A voluntarily relocating microwave incumbent obtains reimbursement rights for the link on the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to § 101.305 of the Commission's rules.

§ 27.1166 Reimbursement under the Cost-Sharing Plan.

(a) *Registration of reimbursement rights.* Claims for reimbursement under the cost-sharing plan are limited to relocation expenses incurred on or after the date when the first AWS license is issued in the relevant AWS band (start date). If a clearinghouse is not selected by that date (see § 27.1162) claims for reimbursement (see § 27.1166) and notices of operation (see § 27.1170) for activities that occurred after the start date but prior to the clearinghouse selection must be submitted to the clearinghouse within 30 calendar days of the selection date.

(1) To obtain reimbursement, an AWS relocater or MSS/ATC relocater must submit documentation of the relocation agreement to the clearinghouse within 30 calendar days of the date a relocation agreement is signed with an incumbent. In the case of involuntary relocation, an AWS relocater or MSS/ATC relocater must submit documentation of the relocated system within 30 calendar days after the end of the relocation.

(2) To obtain reimbursement, a voluntarily relocating microwave incumbent must submit documentation of the relocation of the link to the clearinghouse within 30 calendar days of the date that the incumbent notifies the Commission that it intends to discontinue, or has discontinued, the use of the link, pursuant to § 101.305 of the Commission's rules.

(b) *Documentation of expenses.* Once relocation occurs, the AWS relocater, MSS/ATC relocater, or the voluntarily relocating microwave incumbent, must submit documentation itemizing the amount spent for items specifically listed in § 27.1164(b), as well as any reimbursable items not specifically listed in § 27.1164(b) that are directly attributable to actual relocation costs. Specifically, the AWS

relocator, MSS/ATC relocator, or the voluntarily relocating microwave incumbent must submit, in the first instance, only the uniform cost data requested by the clearinghouse along with a copy, without redaction, of either the relocation agreement, if any, or the third party appraisal described in (b)(1), if relocation was undertaken by the microwave incumbent. AWS relocators, MSS/ATC relocators and voluntarily relocating microwave incumbents must maintain documentation of cost-related issues until the applicable sunset date and provide such documentation upon request, to the clearinghouse, the Commission, or entrants that trigger a cost-sharing obligation. If an AWS relocator pays a microwave incumbent a monetary sum to relocate its own facilities, the AWS relocator must estimate the costs associated with relocating the incumbent by itemizing the anticipated cost for items listed in § 27.1164(b). If the sum paid to the incumbent cannot be accounted for, the remaining amount is not eligible for reimbursement.

(1) *Third party appraisal.* The voluntarily relocating microwave incumbent, must also submit an independent third party appraisal of its compensable relocation costs. The appraisal should be based on the actual cost of replacing the incumbent's system with comparable facilities and should exclude the cost of any equipment upgrades or items outside the scope of § 27.1164(b).

(2) *Identification of links.* The AWS relocator, MSS/ATC relocator, or the voluntarily relocating microwave incumbent, must identify the particular link associated with appropriate expenses (i.e., costs may not be averaged over numerous links). Where the AWS relocator, MSS/ATC relocator, or voluntarily relocating microwave incumbent relocates both paths of a paired channel microwave link (e.g., 2110-2130 MHz with 2160-2180 MHz and 2130-2150 MHz with 2180-2200 MHz), the AWS relocator, MSS/ATC relocator, or voluntarily relocating microwave incumbent must identify the expenses associated with each paired microwave link.

(c) *Full Reimbursement.* An AWS relocator who relocates a microwave link that is either fully outside its market area or its licensed frequency band may seek full reimbursement through the clearinghouse of compensable costs, up to the reimbursement cap as defined in § 27.1164(b). Such reimbursement will not be subject to depreciation under the cost-sharing formula.

(d) *Good Faith Requirement.* New entrants and incumbent licensees are expected to act in good faith in satisfying the cost-sharing obligations under §§ 27.1160-27.1174. The requirement to act in good faith extends to, but is not limited to, the preparation and submission of the documentation required in (b).

(e) *MSS Participation in the Clearinghouse.* MSS operators are not required to submit reimbursements to the clearinghouse for links relocated due to interference from MSS space-to-Earth downlink operations, but may elect to do so, in which case the MSS operator must identify the reimbursement claim as such and follow the applicable procedures governing reimbursement in Part 27. MSS reimbursement rights and cost-sharing obligations for space-to-Earth downlink operations are governed by § 101.82 of this chapter.

(f) *Reimbursement for Self-relocating FMS links in the 2130-2150 MHz and 2180-2200 MHz bands.* Where a voluntarily relocating microwave incumbent relocates a paired microwave link with paths in the 2130-2150 MHz and 2180-2200 MHz bands, it may not seek reimbursement from MSS operators (including MSS/ATC operators), but is entitled to partial reimbursement from the first AWS beneficiary, equal to fifty percent of its actual costs for relocating the paired link, or half of the reimbursement cap in § 27.1164(b), whichever is less. This amount is subject to depreciation as specified § 27.1164(b). An AWS licensee who is obligated to reimburse relocation costs under this rule is entitled to obtain reimbursement from other AWS beneficiaries in accordance with §§ 27.1164 and 27.1168. For purposes of applying the cost-sharing formula relative to other AWS licensees that benefit from the self-relocation, the fifty percent attributable to the AWS entrant shall be treated as the entire cost of the link relocation, and depreciation shall run from the date on which the

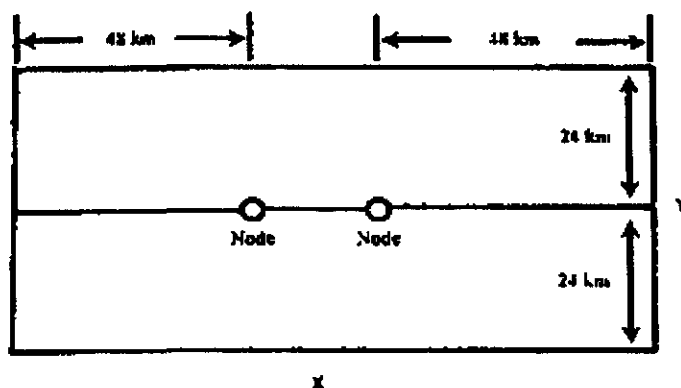
clearinghouse issues the notice of an obligation to reimburse the voluntarily relocating microwave incumbent. The cost-sharing obligations for MSS operators in the 2180-2200 MHz band are governed by § 101.82 of this chapter.

§ 27.1168 Triggering a Reimbursement Obligation.

(a) The clearinghouse will apply the following test to determine when an AWS entity or MSS/ATC entity has triggered a cost-sharing obligation and therefore must pay an AWS relocater, MSS relocater (including MSS/ATC), or a voluntarily relocating microwave incumbent in accordance with the formula detailed in § 27.1164:

- (1) All or part of the relocated microwave link was initially co-channel with the licensed AWS band(s) of the AWS entity or the selected assignment of the MSS operator that seeks and obtains ATC authority (see § 25.149(a)(2)(i) of this chapter);
- (2) An AWS relocater, MSS relocater (including MSS/ATC) or a voluntarily relocating microwave incumbent has paid the relocation costs of the microwave incumbent; and
- (3) The AWS or MSS entity is operating or preparing to turn on a fixed base station (including MSS/ATC) at commercial power and the fixed base station is located within a rectangle (Proximity Threshold) described as follows:

(i) The length of the rectangle shall be x where x is a line extending through both nodes of the microwave link to a distance of 48 kilometers (30 miles) beyond each node. The width of the rectangle shall be y where y is a line perpendicular to x and extending for a distance of 24 kilometers (15 miles) on both sides of x . Thus, the rectangle is represented as follows:



(ii) If the application of the Proximity Threshold Test indicates that a reimbursement obligation exists, the clearinghouse will calculate the reimbursement amount in accordance with the cost-sharing formula and notify the AWS or MSS/ATC entity of the total amount of its reimbursement obligation.

(b) Once a reimbursement obligation is triggered, the AWS or MSS/ATC entity may not avoid paying its cost-sharing obligation by deconstructing or modifying its facilities.

§ 27.1170 Payment Issues.

Prior to initiating operations for a newly constructed site or modified existing site, an AWS entity or MSS/ATC entity is required to file a notice containing site-specific data with the clearinghouse. The notice regarding the new or modified site must provide a detailed description of the proposed site's

spectral frequency use and geographic location, including but not limited to the applicant's name and address, the name of the transmitting base station, the geographic coordinates corresponding to that base station, the frequencies and polarizations to be added, changed or deleted, and the emission designator. If a prior coordination notice (PCN) under § 101.103(d) of this chapter is prepared, AWS entities can satisfy the site-data filing requirement by submitting a copy of their PCN to the clearinghouse. AWS entities or MSS/ATC entities that file either a notice or a PCN have a continuing duty to maintain the accuracy of the site-specific data on file with the clearinghouse. Utilizing the site-specific data, the clearinghouse will determine if any reimbursement obligation exists and notify the AWS entity or MSS/ATC entity in writing of its repayment obligation, if any. When the AWS entity or MSS/ATC entity receives a written copy of such obligation, it must pay directly to the relocater the amount owed within 30 calendar days.

§ 27.1172 Dispute Resolution Under the Cost-Sharing Plan.

(a) Disputes arising out of the cost-sharing plan, such as disputes over the amount of reimbursement required, must be brought, in the first instance, to the clearinghouse for resolution. To the extent that disputes cannot be resolved by the clearinghouse, parties are encouraged to use expedited Alternative Dispute Resolution (ADR) procedures, such as binding arbitration, mediation, or other ADR techniques.

(b) *Evidentiary requirement.* Parties of interest contesting the clearinghouse's determination of specific cost-sharing obligations must provide evidentiary support to demonstrate that their calculation is reasonable and made in good faith. Specifically, these parties are expected to exercise due diligence to obtain the information necessary to prepare an independent estimate of the relocation costs in question and to file the independent estimate and supporting documentation with the clearinghouse.

§ 27.1174 Termination of Cost-Sharing Obligations.

The cost-sharing plan will sunset for all AWS and MSS (including MSS/ATC) entities on the same date on which the relocation obligation for the subject AWS band (*i.e.*, 2110-2150 MHz, 2160-2175 MHz, or 2175-2180 MHz) in which the relocated FMS link was located terminates. AWS or MSS (including MSS/ATC) entrants that trigger a cost-sharing obligation prior to the sunset date must satisfy their payment obligation in full.

New Sections 27.1176 through 27.1190 are added to Subpart L to read as follows:

COST-SHARING POLICIES GOVERNING BROADBAND RADIO SERVICE RELOCATION FROM THE 2150-2160/62 MHZ BAND

§ 27.1176 Cost-sharing requirements for AWS in the 2150-2160/62 MHz band.

(a) Frequencies in the 2150-2160/62 MHz band have been reallocated from the Broadband Radio Service (BRS) to AWS. All AWS entities who benefit from another AWS entity's clearance of BRS incumbents from this spectrum, including BRS incumbents occupying the 2150-2162 MHz band on a primary basis, must contribute to such relocation costs. Only AWS entrants that relocate BRS incumbents are entitled to such reimbursement.

(b) AWS entities may satisfy their reimbursement requirement by entering into private cost-sharing agreements or agreeing to terms other than those specified in § 27.1180. However, AWS entities are required to reimburse other AWS entities that incur relocation costs and are not parties to the alternative agreement. In addition, parties to a private cost-sharing agreement may seek reimbursement through the clearinghouse (as discussed in § 27.1178) from AWS entities that are not

parties to the agreement. The cost-sharing plan is in effect during all phases of BRS relocation until the end of the period specified in § 27.1190. If an AWS licensee enters into a spectrum leasing arrangement and the spectrum lessee triggers a cost-sharing obligation, the licensee is the AWS entity responsible for satisfying cost-sharing obligations under these rules.

§ 27.1178 Administration of the Cost-Sharing Plan

The Wireless Telecommunications Bureau, under delegated authority, will select one or more entities to operate as a neutral, not-for-profit clearinghouse(s). This clearinghouse(s) will administer the cost-sharing plan by, *inter alia*, determining the cost-sharing obligations of AWS entities for the relocation of BRS incumbents from the 2150-2162 MHz band. The clearinghouse filing requirements (see §§ 27.1182(a), 27.1186) will not take effect until an administrator is selected.

§ 27.1180 The cost-sharing formula

(a) An AWS licensee that relocates a BRS system with which it interferes is entitled to *pro rata* reimbursement based on the cost-sharing formula specified in § 27.1164, except that the depreciation factor shall be $[180 - T_m]/180$, and the variable *C* shall be applied as set forth in paragraph (b).

(b) *C* is the actual cost of relocating the system, and includes, but is not limited to, such items as: Radio terminal equipment (TX and/or RX--antenna, necessary feed lines, MUX/Modems); towers and/or modifications; back-up power equipment; monitoring or control equipment; engineering costs (design/path survey); installation; systems testing; FCC filing costs; site acquisition and civil works; zoning costs; training; disposal of old equipment; test equipment (vendor required); spare equipment; project management; site lease renegotiation; required antenna upgrades for interference control; power plant upgrade (if required); electrical grounding systems; Heating Ventilation and Air Conditioning (HVAC) (if required); alternate transport equipment; leased facilities; and end user units served by the base station that is being relocated. In addition to actual costs, *C* may include the cost of an independent third party appraisal conducted pursuant to § 27.1182(a)(3) and incumbent transaction expenses that are directly attributable to the relocation, subject to a cap of two percent of the "hard" costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. There is no cap on the actual costs of relocation.

(c) An AWS system shall be considered an interfering system for purposes of this rule if the AWS system is in all or part of the BRS frequency band and operates within line of sight to BRS operations under the applicable test specified in § 27.1184. An AWS relocater that relocates a BRS system with which it does not interfere is entitled to full reimbursement, as specified in § 27.1182(c).

§ 27.1182 Reimbursement under the Cost-Sharing Plan

(a) *Registration of reimbursement rights.*

(1) To obtain reimbursement, an AWS relocater must submit documentation of the relocation agreement to the clearinghouse within 30 calendar days of the date a relocation agreement is signed with an incumbent. In the case of involuntary relocation, an AWS relocater must submit documentation of the relocated system within 30 calendar days after the end of the one-year trial period.

(2) Registration of any BRS system shall include (i) a description of the system's frequency use; (ii) if the system exclusively provides one-way transmissions to subscribers, the Geographic Service Area of the system; and (iii) if the system does not exclusively provide one-way transmission to subscribers, the system hub antenna's geographic location and the above ground

level height of the system's receiving antenna centerline.

(3) The AWS relocater must also include with its system registration an independent third party appraisal of the compensable relocation costs. The appraisal should be based on the actual cost of replacing the incumbent's system with comparable facilities and should exclude the cost of any equipment upgrades that are not necessary to the provision of comparable facilities. An AWS relocater may submit registration without a third party appraisal if it consents to binding resolution by the clearinghouse of any good faith cost disputes regarding the reimbursement claim, under the following standard: the relocater shall bear the burden of proof, and be required to demonstrate by clear and convincing evidence that its request does not exceed the actual cost of relocating the relevant BRS system or systems to comparable facilities. Failure to satisfy this burden of proof will result in loss of rights to subsequent reimbursement of the disputed costs from any AWS licensee.

(b) *Documentation of expenses.* Once relocation occurs, the AWS relocater must submit documentation itemizing the amount spent for items specifically listed in § 27.1180(b), as well as any reimbursable items not specifically listed in § 27.1180(b) that are directly attributable to actual relocation costs. Specifically, the AWS relocater must submit, in the first instance, only the uniform cost data requested by the clearinghouse along with copies, without redaction, of the relocation agreement, if any, and the third party appraisal described in (a)(3), if prepared. The AWS relocater must identify the particular system associated with appropriate expenses (*i.e.*, costs may not be averaged over numerous systems). If an AWS relocater pays a BRS incumbent a monetary sum to relocate its own facilities in whole or in part, the AWS relocater must itemize the actual costs to the extent determinable, and otherwise must estimate the actual costs associated with relocating the incumbent and itemize these costs. If the sum paid to the incumbent cannot be accounted for, the remaining amount is not eligible for reimbursement. All AWS relocators seeking reimbursement through the clearinghouse have an ongoing duty to maintain all relevant records of BRS relocation-related expenses until the sunset of cost-sharing obligations, and to provide, upon request, such documentation, including a copy of the independent appraisal if one was conducted, to the clearinghouse, the Commission, or AWS entrants that trigger a cost-sharing obligation.

(c) *Full reimbursement.* An AWS relocater who relocates a BRS system that is either (1) wholly outside its frequency band or (2) not within line of sight of the relocater's transmitting base station may seek full reimbursement through the clearinghouse of compensable costs. Such reimbursement will not be subject to depreciation under the cost-sharing formula.

(d) *Good Faith Requirement.* New entrants and incumbent licensees are expected to act in good faith in satisfying the cost-sharing obligations under §§ 27.1176-27.1190. The requirement to act in good faith extends to, but is not limited to, the preparation and submission of the documentation required in (b).

§ 27.1184 Triggering a reimbursement obligation.

(a) The clearinghouse will apply the following test to determine when an AWS entity has triggered a cost-sharing obligation and therefore must pay an AWS relocater of a BRS system in accordance with the formula detailed in § 27.1180:

- (1) All or part of the relocated BRS system was initially co-channel with the licensed AWS band(s) of the AWS entity;
- (2) An AWS relocater has paid the relocation costs of the BRS incumbent; and
- (3) The other AWS entity has turned on or is preparing to turn on a fixed base station at

commercial power and the incumbent BRS system would have been within the line of sight of the AWS entity's fixed base station, as determined below.

(i) For a BRS system using the 2150-2160/62 MHz band exclusively to provide one-way transmissions to subscribers, the clearinghouse will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's geographic service area (GSA), based on the following criteria: use of 9.1 meters (30 feet) for the receiving antenna height, use of the actual transmitting antenna height and terrain elevation, and assumption of 4/3 Earth radius propagation conditions. Terrain elevation data must be obtained from the U.S. Geological Survey (USGS) 3-second database. All coordinates used in carrying out the required analysis shall be based upon use of NAD-83.

(ii) For all other BRS systems using the 2150-2160/62 MHz band, the clearinghouse will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's receive station hub using the method prescribed in "Methods for Predicting Interference from Response Station Transmitters and to Response Station Hubs and for Supplying Data on Response Station Systems. MM Docket 97-217," in Amendment of Parts 1, 21 and 74 to Enable Multipoint Distribution Service and Instructional Television Fixed Service Licensees to Engage in Fixed Two-Way Transmissions, MM Docket No. 97-217, *Report and Order on Further Reconsideration and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 14566 at 14610, Appendix D.

(b) If the application of the trigger test described above indicates that a reimbursement obligation exists, the clearinghouse will calculate the reimbursement amount in accordance with the cost-sharing formula and notify the subsequent AWS entity of the total amount of its reimbursement obligation.

(c) Once a reimbursement obligation is triggered, the AWS entity may not avoid paying its cost-sharing obligation by deconstructing or modifying its facilities.

§ 27.1186 Payment issues

Payment of cost-sharing obligations for the relocation of BRS systems in the 2150-60/62 MHz band is subject to the rules set forth in § 27.1170. If an AWS licensee is initiating operations for a newly constructed site or modified existing site in licensed bands overlapping the 2150-2160/62 MHz band, the AWS licensee must file with the clearinghouse, in addition to the site-specific data required by § 27.1170, the above ground level height of the transmitting antenna centerline. AWS entities have a continuing duty to maintain the accuracy of the site-specific data on file with the clearinghouse.

§ 27.1188 Dispute resolution under the Cost-Sharing Plan

(a) Disputes arising out of the cost-sharing plan, such as disputes over the amount of reimbursement required, must be brought, in the first instance, to the clearinghouse for resolution. To the extent that disputes cannot be resolved by the clearinghouse, parties are encouraged to use expedited Alternative Dispute Resolution (ADR) procedures, such as binding arbitration, mediation, or other ADR techniques.

(b) *Evidentiary requirement.* Parties of interest contesting the clearinghouse's determination of specific cost-sharing obligations must provide evidentiary support to demonstrate that their calculation is reasonable and made in good faith. Specifically, these parties are expected to exercise due diligence to obtain the information necessary to prepare an independent estimate of the relocation costs in question and to file the independent estimate and supporting documentation with the clearinghouse.

§ 27.1190 Termination of cost-sharing obligations.

The plan for cost-sharing in connection with BRS relocation will sunset for all AWS entities fifteen years after the relocation sunset period for BRS relocation commences, *i.e.*, fifteen years after the first AWS licenses are issued in any part of the 2150-2162 MHz band. AWS entrants that trigger a cost-sharing obligation prior to the sunset date must satisfy their payment obligation in full.

6. Part 27, Subpart M is revised by adding Sections 27.1250 through 27.1255 to read as follows:

RELOCATION PROCEDURES FOR THE 2150-2160/62 MHZ BAND**§ 27.1250 Transition of the 2150-2160/62 MHz band from the Broadband Radio Service to the Advanced Wireless Service.**

The 2150-2160/62 MHz band has been allocated for use by the Advanced Wireless Service (AWS). The rules in this section provide for a transition period during which AWS licensees may relocate existing Broadband Radio Service (BRS) licensees using these frequencies to their assigned frequencies in the 2496-2690 MHz band or other media.

(a) AWS licensees and BRS licensees shall engage in mandatory negotiations for the purpose of agreeing to terms under which the BRS licensees would:

- (1) Relocate their operations to other frequency bands or other media; or alternatively
- (2) Accept a sharing arrangement with the AWS licensee that may result in an otherwise impermissible level of interference to the BRS operations.

(b) If no agreement is reached during the mandatory negotiation period, an AWS licensee may initiate involuntary relocation procedures. Under involuntary relocation, the incumbent is required to relocate, provided that the AWS licensee meets the conditions of § 27.1252.

(c) Relocation of BRS licensees by AWS licensees will be subject to a three-year mandatory negotiation period. BRS licensees may suspend the running of the three-year negotiation period for up to one year if the BRS licensee cannot be relocated to comparable facilities at the time the AWS licensee seeks entry into the band.

§ 27.1251 Mandatory Negotiations.

(a) Once mandatory negotiations have begun, a BRS licensee may not refuse to negotiate and all parties are required to negotiate in good faith. Good faith requires each party to provide information to the other that is reasonably necessary to facilitate the relocation process. The BRS licensee is required to cooperate with an AWS licensee's request to provide access to the facilities to be relocated, other than the BRS customer location, so that an independent third party can examine the BRS system and prepare an appraisal of the costs to relocate the incumbent. In evaluating claims that a party has not negotiated in good faith, the FCC will consider, *inter alia*, the following factors:

- (1) Whether the AWS licensee has made a bona fide offer to relocate the BRS licensee to comparable facilities in accordance with § 27.1252(b);
- (2) If the BRS licensee has demanded a premium, the type of premium requested (*e.g.*, whether the premium is directly related to relocation, such as analog-to-digital conversions, versus other types of premiums), and whether the value of the premium as compared to the cost of providing comparable facilities is disproportionate (*i.e.*, whether there is a lack of proportion or relation between the two);

- (3) What steps the parties have taken to determine the actual cost of relocation to comparable facilities;
- (4) Whether either party has withheld information requested by the other party that is necessary to estimate relocation costs or to facilitate the relocation process.
- (b) Any party alleging a violation of our good faith requirement must attach an independent estimate of the relocation costs in question to any documentation filed with the Commission in support of its claim. An independent cost estimate must include a specification for the comparable facility and a statement of the costs associated with providing that facility to the incumbent licensee.
- (c) Mandatory negotiations will commence for each BRS licensee when the AWS licensee informs the BRS licensee in writing of its desire to negotiate. Mandatory negotiations will be conducted with the goal of providing the BRS licensee with comparable facilities, defined as facilities possessing the following characteristics:
- (1) *Throughput*. Communications throughput is the amount of information transferred within a system in a given amount of time. System is defined as a base station and all end user units served by that base station. If analog facilities are being replaced with analog, comparable facilities may provide a comparable number of channels. If digital facilities are being replaced with digital, comparable facilities provide equivalent data loading bits per second (bps).
- (2) *Reliability*. System reliability is the degree to which information is transferred accurately within a system. Comparable facilities provide reliability equal to the overall reliability of the BRS system. For digital systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital video transmission, it is measured by whether the end-to-end transmission delay is within the required delay bound. If an analog system is replaced with a digital system, only the resulting frequency response, harmonic distortion, signal-to-noise ratio and its reliability will be considered in determining comparable reliability.
- (3) *Operating Costs*. Operating costs are the cost to operate and maintain the BRS system. AWS licensees would compensate BRS licensees for any increased recurring costs associated with the replacement facilities (e.g., additional rental payments, and increased utility fees) for five years after relocation. AWS licensees could satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the BRS licensee would be equivalent to the replaced system in order for the replacement system to be comparable.
- (d) AWS licensees are responsible for the relocation costs of end user units served by the BRS base station that is being relocated. If a lessee is operating under a BRS license, the BRS licensee may rely on the throughput, reliability, and operating costs of facilities in use by a lessee in negotiating comparable facilities and may include the lessee in negotiations.

§ 27.1252 Involuntary Relocation Procedures.

- (a) If no agreement is reached during the mandatory negotiation period, an AWS licensee may initiate involuntary relocation procedures under the Commission's rules. AWS licensees are obligated to pay to relocate BRS systems to which the AWS system poses an interference problem. Under involuntary relocation, the BRS licensee is required to relocate, provided that the AWS licensee:
- (1) Guarantees payment of relocation costs, including all engineering, equipment, site and FCC fees, as well as any legitimate and prudent transaction expenses incurred by the BRS licensee that are directly attributable to an involuntary relocation, subject to a cap of two percent of the "hard"

costs involved. Hard costs are defined as the actual costs associated with providing a replacement system, such as equipment and engineering expenses. There is no cap on the actual costs of relocation. AWS licensees are not required to pay BRS licensees for internal resources devoted to the relocation process. AWS licensees are not required to pay for transaction costs incurred by BRS licensees during the mandatory period once the involuntary period is initiated, or for fees that cannot be legitimately tied to the provision of comparable facilities; and

(2) Completes all activities necessary for implementing the replacement facilities, including engineering and cost analysis of the relocation procedure and, if radio facilities are used, identifying and obtaining, on the incumbents' behalf, new microwave frequencies and frequency coordination.

(b) Comparable facilities. The replacement system provided to an incumbent during an involuntary relocation must be at least equivalent to the existing BRS system with respect to the following three factors:

(1) *Throughput.* Communications throughput is the amount of information transferred within a system in a given amount of time. System is defined as a base station and all end user units served by that base station. If analog facilities are being replaced with analog, the AWS licensee is required to provide the BRS licensee with a comparable number of channels. If digital facilities are being replaced with digital, the AWS licensee must provide the BRS licensee with equivalent data loading bits per second (bps). AWS licensees must provide BRS licensees with enough throughput to satisfy the BRS licensee's system use at the time of relocation, not match the total capacity of the BRS system.

(2) *Reliability.* System reliability is the degree to which information is transferred accurately within a system. AWS licensees must provide BRS licensees with reliability equal to the overall reliability of their system. For digital data systems, reliability is measured by the percent of time the bit error rate (BER) exceeds a desired value, and for analog or digital video transmissions, it is measured by whether the end-to-end transmission delay is within the required delay bound.

(3) *Operating costs.* Operating costs are the cost to operate and maintain the BRS system. AWS licensees must compensate BRS licensees for any increased recurring costs associated with the replacement facilities (*e.g.*, additional rental payments, increased utility fees) for five years after relocation. AWS licensees may satisfy this obligation by making a lump-sum payment based on present value using current interest rates. Additionally, the maintenance costs to the BRS licensee must be equivalent to the replaced system in order for the replacement system to be considered comparable.

(c) AWS licensees are responsible for the relocation costs of end user units served by the BRS base station that is being relocated. If a lessee is operating under a BRS license, the AWS licensee shall on the throughput, reliability, and operating costs of facilities in use by a lessee at the time of relocation in determining comparable facilities for involuntary relocation purposes.

(d) *Twelve-month trial period.* If, within one year after the relocation to new facilities, the BRS licensee demonstrates that the new facilities are not comparable to the former facilities, the AWS licensee must remedy the defects or pay to relocate the BRS licensee to one of the following: its former or equivalent 2 GHz channels, another comparable frequency band, a land-line system, or any other facility that satisfies the requirements specified in paragraph (b) of this section. This trial period commences on the date that the BRS licensee begins full operation of the replacement system. If the BRS licensee has retained its 2 GHz authorization during the trial period, it must return the license to the Commission at the end of the twelve months.

§ 27.1253 Sunset Provisions.

(a) BRS licensees will maintain primary status in the 2150-2160/62 MHz band unless and until an AWS licensee requires use of the spectrum. AWS licensees are not required to pay relocation costs

after the relocation rules sunset (*i.e.* fifteen years from the date the first AWS license is issued in the band). Once the relocation rules sunset, an AWS licensee may require the incumbent to cease operations, provided that the AWS licensee intends to turn on a system within interference range of the incumbent, as determined by § 27.1255. AWS licensee notification to the affected BRS licensee must be in writing and must provide the incumbent with no less than six months to vacate the spectrum. After the six-month notice period has expired, the BRS licensee must turn its license back into the Commission, unless the parties have entered into an agreement which allows the BRS licensee to continue to operate on a mutually agreed upon basis.

(b) If the parties cannot agree on a schedule or an alternative arrangement, requests for extension will be accepted and reviewed on a case-by-case basis. The Commission will grant such extensions only if the incumbent can demonstrate that:

- (1) It cannot relocate within the six-month period (*e.g.*, because no alternative spectrum or other reasonable option is available), and;
- (2) The public interest would be harmed if the incumbent is forced to terminate operations.

§ 27.1254 Eligibility.

(a) BRS licensees with primary status in the 2150-2162 MHz band as of [effective date of Ninth R&O] will be eligible for relocation insofar as they have facilities that are constructed and in use as of this date.

(b) *Future Licensing and Modifications.* After [effective date of Ninth R&O], all major modifications to existing BRS systems in use in the 2150-2160/62 MHz band will be authorized on a secondary basis to AWS systems, unless the incumbent affirmatively justifies primary status and the incumbent BRS licensee establishes that the modification would not add to the relocation costs of AWS licensees. Major modifications include the following:

- (1) Additions of new transmit sites or base stations made after [effective date of Ninth R&O];
- (2) Changes to existing facilities made after [effective date of Ninth R&O] that would increase the size or coverage of the service area, or interference potential, and that would also increase the throughput of an existing system (*e.g.*, sector splits in the antenna system). Modifications to fully utilize the existing throughput of existing facilities (*e.g.*, to add customers) will not be considered major modifications even if such changes increase the size or coverage of the service area, or interference potential.

§ 27.1255 Relocation Criteria for Broadband Radio Service Licensees in the 2150-2160/62 MHz band.

(a) An AWS licensee in the 2150-2160/62 MHz band, prior to initiating operations from any base or fixed station that is co-channel to the 2150-2160/62 MHz band, must relocate any incumbent BRS system that is within the line of sight of the AWS licensee's base or fixed station. For purposes of this section, a determination of whether an AWS facility is within the line of sight of a BRS system will be made as follows:

- (1) For a BRS system using the 2150-2160/62 MHz band exclusively to provide one-way transmissions to subscribers, the AWS licensee will determine whether there is an unobstructed signal path (line of sight) to the incumbent licensee's geographic service area (GSA), based on the following criteria: use of 9.1 meters (30 feet) for the receiving antenna height, use of the actual transmitting antenna height and terrain elevation, and assumption of 4/3 Earth radius propagation